

Unicode® 2 Series Polyamide Control Stations

Increased Safety

Polyamide

Zone 1 and 2 – 21 and 22

Gas (G) and Dust (D)

Applications

- For use in IEC governed hazardous areas.
- Local control stations and motor control stations for use in hazardous areas covering the broadest possible range of applications.
- Control of equipment at:
 - Power plants
 - Chemical and petrochemical plants
 - Petroleum refineries
 - Reverse osmosis plants
 - Pulp and paper processing plants
 - Various industrial applications
- Push buttons and selector switches are used in conjunction with contactors or magnetic starters for remote control of motors in hazardous locations. They provide circuit control and/or selection.
- Pilot lights provide visual assurance that an electrical function is being performed at a remote or hazardous location.
- For use in washdown areas.

Features

- Employs Ex de method of protection which eliminates the need for external seals.
- Operators include push buttons, illuminated push buttons, selector switches, control and load break switches and LED pilot lights.
- Pilot light employs high intensity single LED with lifetime of 100,000 hours that can be used at:
 - 12 Vac to 254 Vac 50/60 Hz
 - 12 Vdc to 60 Vdc
- Up to 3 contact blocks per actuator can be used.
- Contact block technical data:
 - IEC rated operating voltage (Ue): 500 Vac – 110 Vdc
 - IEC switching capacity:
 - AC12: 16 Amp/400 Vac
 - AC14: 10 Amp/400 Vac
 - AC15: 6 Amp/500 Vac
 - DC13: 2 Amp/24 Vdc and 1 Amp/110 Vdc
- Selector switch technical data:
 - IEC rated operating voltage: 690 Vac
 - IEC rated operating current: maximum 16 Amp
 - IEC switching capacity:
 - AC1: 16 Amp/690 Vac
 - AC15: 16 Amp/415 Vac
 - AC3: 8 Amp/500 Vac
 - AC3: 4 Amp/690 Vac
 - AC3: 16 Amp/690 Vac
 - DC1: 10 Amp/24 Vdc
 - DC1: 6 Amp/60 Vdc
 - DC1: 6 Amp/110 Vdc (2 contacts wired in series)
 - DC1: 6 Amp/220 Vdc (3 contacts in series)
- Enclosures are rated for IP66 with firmly secured gasket.
- Operators and contact blocks are spaced so as to have easy and ample space for wiring.
- Wide selection of termination methods available.
- Choice of DIN rail mounted high performance contact block suitable for low intensity (less than 5mA).
- TS35 rail mounted components held securely in place during operation and easily removed for service.



U43W2 VA13A5A9



U42W2 A5A9

- Brass Inserts are provided for TS35 DIN rails or mounting plate to be installed inside the enclosure.
- Captive, corrosion resistant stainless steel cover screws.

Standard Materials

- Body, cover, cable gland and blanking plug: polyamide, black finish
- Cover screws: stainless steel
- Optional nameplates: stainless steel

Accessories

- Key for changing actuator blocks.
- Guard for mushroom head actuator.
- Padlockable guard.
- M5 earth stud.
- Combination drain and breather available in brass, polyamide and stainless steel.

Options

- Nameplates: Lamacoid with different color combinations.
- Padlocking facility at left, center, right or any position on selector switches.
- Padlocking facility for momentary and maintained push buttons.
- Special contact arrangements available, see *Unicode 2 Series Customized Control Stations*.

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Certification and Compliances

◆ ATEX Certification

• Certification Type PCe

- Gas: Zone 1 and 2
 - Conforming to ATEX 94/9/CE:  II 2 G
 - Type of Protection: Ex de IIC / Ex demb IIC (depending of the actuator)
 - Temperature class: T6
- Dust: Zone 21 and 22
 - Conforming to ATEX 94/9/CE:  II 2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T75 °C
- Ambient Temperature: -20 °C to +55 °C
- CE Declaration of Conformity: 50221
- ATEX Certificate: LCIE 00 ATEX 6047
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK09

◆ EURASEC Certification

- EURASEC RU C-FR ГБ 05.B.00911

◆ Others Certification ①

- INMETRO Certificate: BVC 11.0640-X

① Inmetro certification available on special request only. Contact your local sales for more information.

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Size 1 Polyamide Control Station:
Included: 1 white self-adhesive laminated plastic nameplate, 2 x M20 bottom clearance entries, 1 blanking plug, 1 cable gland in polyamide [Ø 6.5 mm to 14.5 mm], 2 locknuts.



Description/Function		Diagram	Bottom Entries	Weight kg	Volume dm³	Catalog Number
Momentary Push Button						
	Green insert 'I' + red insert 'O' with 1NO + 1NC momentary contacts		2 x M20	0.48	2.5	U41W2A3
	1x green push button "I" with 1NO momentary contact		2 x M20	0.48	2.5	U41W2A5
	1x red push button "O" with 1NC momentary contact		2 x M20	0.48	2.5	U41W2A9
Emergency Stop						
	Red mushroom head push-pull 1NC maintained contact		2 x M20	0.48	2.5	U41W2D9
	Red mushroom head push-pull 1NO + 1NC maintained contacts		2 x M20	0.48	2.5	U41W2D3
	Red mushroom head key release 1NC maintained contact		2 x M20	0.48	2.5	U41W2C9
	Red mushroom head key release 1NO + 1NC maintained contacts		2 x M20	0.48	2.5	U41W2C3
Mushroom Head Push Button						
	Black mushroom head push button 1NO + 1NC momentary contacts		2 x M20	0.48	2.5	U41W2B3
	Red mushroom head push button 1NC momentary contact		2 x M20	0.48	2.5	U41W2R9
Key Push Button						
	With key removable in both positions 1NO + 1NC maintained contacts		2 x M20	0.48	2.5	U41W2E3

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Size 1 Polyamide Control Station:

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Description/Function	Diagram	Bottom Entries	Weight kg	Volume dm³	Catalog Number
Pilot Light					
1x red pilot light ①		2 x M20	0.48	2.5	U41W2PR
1x green pilot light ①		2 x M20	0.48	2.5	U41W2PG
1x blue pilot light ①		2 x M20	0.48	2.5	U41W2PB
1x yellow pilot light ①		2 x M20	0.48	2.5	U41W2PY
1x white pilot light ①		2 x M20	0.48	2.5	U41W2PW
2-Position Selector Switch					
2 fixed positions '0 - I' 1NO + 1NC contacts		2 x M20	0.48	2.5	U41W2H3
3-Position Selector Switch					
3 fixed positions 'I - 0 - II' 2NO contact		2 x M20	0.48	2.5	U41W2J1
3 positions 'I - 0 - II' With spring return from I to 0 1NO + 1NC contacts		2 x M20	0.48	2.5	U41W2N3
3 positions 'I - 0 - II' With spring return from II to 0 1NO + 1NC contacts		2 x M20	0.48	2.5	U41W2M3
Size 2 Polyamide Control Station:					
Included: 1 white self-adhesive laminated plastic nameplate, 2 x M20 bottom clearance entries, 1 blanking plug, 1 cable gland in polyamide [Ø 6.5 mm to 14.5 mm], 2 locknuts.					
Description/Function	Diagram	Bottom Entries	Weight kg	Volume dm³	Catalog Number
Twin Push Button					
1x green push button 'I' with 1NO contact 1x red push button 'O' with 1NC contact Momentary contacts		2 x M20	0.62	2.5	U42W2A5A9
1x green push button 'I' with 1NO + 1NC contacts 1x red push button 'O' with 1NO + 1NC contacts Momentary contacts		2 x M20	0.62	2.5	U42W2A3A3

① 12 Vac to 254 Vac 50/60 Hz - 12 Vdc to 60 Vdc.

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Size 2 Polyamide Control Station:

Included: 1 white self-adhesive laminated plastic nameplate, 2 x M20 bottom clearance entries, 1 blanking plug, 1 cable gland in polyamide [Ø 6.5 mm to 14.5 mm], 2 locknuts.



Description/Function		Diagram	Bottom Entries	Weight kg	Volume dm³	Catalog Number
Push Button + Push-Pull Emergency Stop						
	1x green push button 'I' with 1NO momentary contact 1x red mushroom head push-pull with 1NC maintained contact		2 x M20	0.62	2.5	U42W2A5D9
	1x green push button 'I' with 1NO + 1NC momentary contacts 1x red mushroom head push-pull with 1NO + 1NC maintained contacts		2 x M20	0.62	2.5	U42W2A3D3
Push Button + Push-Pull Emergency Stop						
	1x green light ① 1x green push button 'I' with 1NO momentary contact		2 x M20	0.62	2.5	U42W2PGA5
	1x green light ① 1x green push button 'I' with 1NO + 1NC momentary contacts		2 x M20	0.62	2.5	U42W2PGA3
	1x red light ① 1x red push button 'O' with 1NC momentary contact		2 x M20	0.62	2.5	U42W2PRA9
	1x red light ① 1x red push button 'O' with 1NO + 1NC momentary contacts		2 x M20	0.62	2.5	U42W2PRA3
Ammeter						
	1x ammeter 48 x 48 mm, 1A C.T., 3 F.L.C., with 0 - 1 - 3 scale		2 x M20	0.56	2.5	U42W2VA13

① 12 Vac to 254 Vac 50/60 Hz - 12 Vdc to 60 Vdc.

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Zone 1 and 2 – 21 and 22

Gas (G) and Dust (D)

Size 3 Polyamide Control Station:

Included: 1 white self-adhesive laminated plastic nameplate, 2 x M20 bottom clearance entries, 1 blanking plug, 1 cable gland in polyamide [Ø 6.5 mm to 14.5 mm], 2 locknuts.



Description/Function		Diagram	Bottom Entries	Weight kg	Volume dm³	Catalog Number
Twin Push Buttons + Push-Pull Emergency Stop						
	1x green push button 'I' with 1NO contacts 1x red push button 'O' with 1NC contact Momentary contacts 1x red mushroom head push-pull emergency button with 1NO + 1NC maintained contacts		2 x M20	0.78	2.5	U43W2A5A9D3
	1x green push button 'I' with 1NO + 1NC contacts 1x red push button 'O' with 1NO + 1NC contacts Momentary contacts 1x red mushroom head push-pull emergency button with 1NO + 1NC maintained contacts		2 x M20	0.78	2.5	U43W2A3A3D3
Pilot Light + Twin Push Buttons						
	1x green light ① 1x green push button 'I' with 1NO contact 1x red push button 'O' with 1NC contact Momentary contacts		2 x M20	0.78	2.5	U43W2PGA5A9
	1x red light ① 1x green push button 'I' with 1NO contact 1x red push button 'O' with 1NO contact Momentary contacts		2 x M20	0.78	2.5	U43W2PRA5A9
	1x green light ① 1x green push button 'I' with 1NO + 1NC contacts 1x red push button 'O' with 1NO + 1NC contacts Momentary contacts		2 x M20	0.78	2.5	U43W2PGA3A3
	1x red light ① 1x green push button 'I' with 1NO + 1NC contacts 1x red push button 'O' with 1NO + 1NC contacts Momentary contacts		2 x M20	0.78	2.5	U43W2PRA3A3

① 12 Vac to 254 Vac 50/60 Hz - 12 Vdc to 60 Vdc.

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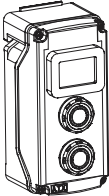


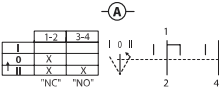


Polyamide

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Gas (G) and Dust (D)

Size 3 Polyamide Control Station:

Included: 1 white self-adhesive laminated plastic nameplate, 2 x M20 bottom clearance entries, 1 blanking plug, 1 cable gland in polyamide [Ø 6.5 mm to 14.5 mm], 2 locknuts.



Description/Function		Diagram	Bottom Entries	Weight kg	Volume dm³	Catalog Number
Ammeter + Twin Push Button						
	1x ammeter 48 x 48 mm, 1A C.T., 3 F.L.C., with 0 - 1 - 3 scale 1x green push button 'I' with 1NO contact 1x red push button 'O' with 1NC contact Momentary contacts		2 x M20	0.80	2.5	U43W2VA13A5A9
Ammeter + 3-Position Selector Switch						
	1x ammeter 48 x 48 mm, 1A C.T., 3 F.L.C., with 0 - 1 - 3 scale 1x 3-position selector switch 'I - 0 - II' with spring return from II to 0 1NO + 1NC contacts		2 x M20	0.80	2.5	U43W2VA13M3
Special Accessories for Polyamide Enclosure						
	Brass Earthing Plate for 2 x M20					
	Equipped with 2 earth connections				098661	
	Tube or Frame Fixing					
	FOR SIZE 1 ONLY For all tube diameter ≥ 80 mm Using a metal strip (not supplied) maximum width 22 mm				098656	

Controls

CONTROL STATIONS AND SWITCHES - INCREASED SAFETY

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Nameplates — Set of 10

Blank self-adhesive, laminated plastic 58 mm x 18 mm.

Color	Catalog Number	Pack
White (black letters)	UNPW	1
Yellow (black letters)	UNPY	1
Red (white letters)	UNPR	1
Blue (white letters)	UNPB	1
Black (white letters)	UNPN	1
Green (white letters)	UNPG	1

Inserts for Push Button — Set of 5

Marking	Color	Catalog Number	Pack
(unmarked)	Green	UIAG	1
(unmarked)	Red	UIAR	1
(unmarked)	Yellow	UIAY	1
(unmarked)	White	UIAW	1
(unmarked)	Blue	UIAB	1
(unmarked)	Black	UIAN	1
ON	Green	UIA01	1
OFF	Red	UIA02	1
START	Green	UIA03	1
STOP	Red	UIA04	1
MARCHE	Green	UIA05	1
ARRET	Red	UIA06	1
I	Green	UIA07	1
O	Red	UIA08	1

Inserts for Illuminated Push Button — Set of 5

Marking	Color	Catalog Number	Pack
(unmarked)	Green	UILG	1
(unmarked)	Red	UILR	1
(unmarked)	Yellow	UILY	1
(unmarked)	White	UILW	1
(unmarked)	Blue	UILB	1
ON	Green	UIL01	1
OFF	Red	UIL02	1
START	Green	UIL03	1
STOP	Red	UIL04	1
MARCHE	Green	UIL05	1
ARRET	Red	UIL06	1
I	Green	UIL07	1
O	Red	UIL08	1

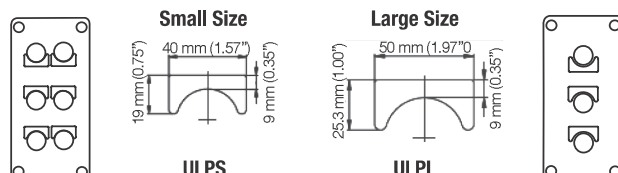
Spare Key

For all key-operated buttons.

Description	Catalog Number	Pack
Spare key type 4 A 185	SK4A185	1

Standard Legend Plates

Two sizes available. Self-adhesive yellow laminated plastic (black lettering).



Text	Catalog Number		
	Small	Large	Pack
Blank (set of 10)	ULPS	ULPL	1
ON	ULPSA01	ULPLA01	1
OFF	ULPSA02	ULPLA02	1
FORWARD	ULPSA03	ULPLA03	1
REVERSE	ULPSA04	ULPLA04	1
JOG	ULPSA05	ULPLA05	1
RUN	ULPSA06	ULPLA06	1
START	ULPSA07	ULPLA07	1
STOP	ULPSA08	ULPLA08	1
UP	ULPSA09	ULPLA09	1
DOWN	ULPSA10	ULPLA10	1
FAST	ULPSA11	ULPLA11	1
SLOW	ULPSA12	ULPLA12	1
RAISE	ULPSA13	ULPLA13	1
LOWER	ULPSA14	ULPLA14	1
OPEN	ULPSA15	ULPLA15	1
CLOSE	ULPSA16	ULPLA16	1
LOW	ULPSA17	ULPLA17	1
HIGH	ULPSA18	ULPLA18	1
TEST	ULPSA19	ULPLA19	1
RESET	ULPSA20	ULPLA20	1
EMERGENCY STOP	ULPSA21	ULPLA21	1
MARCHE	ULPSA22	ULPLA22	1
ARRET	ULPSA23	ULPLA23	1
ARRET D'URGENCE	ULPSA24	ULPLA24	1
HAUT	ULPSA25	ULPLA25	1
BAS	ULPSA26	ULPLA26	1
O - I	ULPSH01	ULPLH01	1
ON - OFF	ULPSH02	ULPLH02	1
START - STOP	ULPSH03	ULPLH03	1
STOP - START	ULPSH04	ULPLH04	1
HAND - AUTO	ULPSH05	ULPLH05	1
MANU - AUTO	ULPSH06	ULPLH06	1
FORWARD - REVERSE	ULPSH07	ULPLH07	1
REMOTE - LOCAL	ULPSH08	ULPLH08	1
MARCHE - ARRET	ULPSH09	ULPLH09	1
I - O - II	ULPSJ01	ULPLJ01	1
OFF - O - ON	ULPSJ02	ULPLJ02	1
START - NORMAL - STOP	ULPSJ03	ULPLJ03	1
HAND - OFF - AUTO	ULPSJ04	ULPLJ04	1
MANU - O - AUTO	ULPSJ05	ULPLJ05	1
FORWARD - OFF - REVERSE	ULPSJ06	ULPLJ06	1
LOCAL - REMOTE - AUTO	ULPSJ07	ULPLJ07	1
LOCAL - O - REMOTE	ULPSJ08	ULPLJ08	1
MARCHE - NORMAL - ARRET	ULPSJ09	ULPLJ09	1

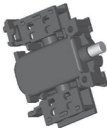

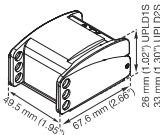


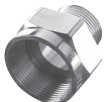



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Description		Catalog Number
	Additional Contacts	
	Each actuator is capable of activating 3 contacts. Exception: Illuminated push button and all actuators with key: 2 contacts maximum	
	1NO contact 1NC contact	UCB5R UCB9R
	Yellow Guard Mushroom head protection for emergency stop	098657
	Padlockable Guard	
	Stainless steel and plastic cover, capacity: 3 padlocks diameter 6 mm maximum (not supplied)	
	For push button and rotary actuator For mushroom head actuator	UPLD1S UPLD2S
	Cable Gland Exe For unarmored cable Exe - IP66 - in polyamide entry thread seal M20 (capacity 6.5-14.5 mm)	095605
	For armored cable Exe/Exd - IP66 - in nickel plated brass (without entry thread seal)	
	Braid and Tape type: M20 (inner: 6.4-14.0/outer: 12.5-20.9 mm)	20E1FX5
	Single Wired Armor (SWA): M20 (inner: 6.4-14.0/outer: 12.5-20.9 mm)	20E1FW5
	Adaptors Exd/Exe - IP66 in nickel plated brass (without entry thread seal) Male M20 - Female 1/2" NPT Male M20 - Female 3/4" NPT	737DM2T15 737DM2T25
	Entry Thread Seal M20 (in white nylon)	20ETS2
	Combination Drain and Breather Exe - IP66 - supplied with entry thread seal and locknut M20 male thread in Polyamide M20 male thread in Brass M20 male thread in Stainless Steel	DBE20P DBE20B DBE20S
	Feed-Thru Earth Stud Terminal Exe - IP66 - supplied with weatherproof seal and green/yellow earth conductor — 300 mm length M20 with M5 earth and 2.5 mm² conductor	PREESTM20

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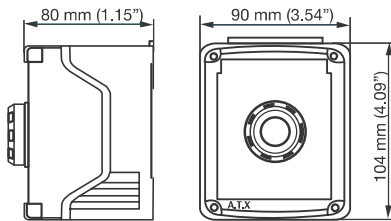
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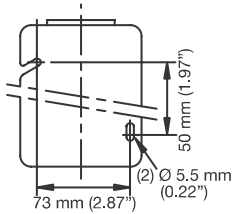
Polyamide

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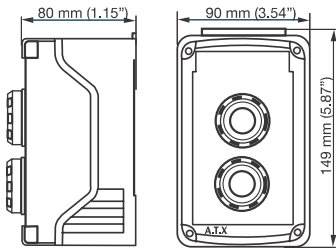
Dimensions in Millimeters



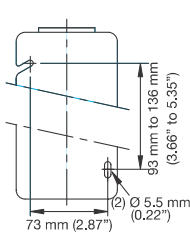
Size 1 Enclosure



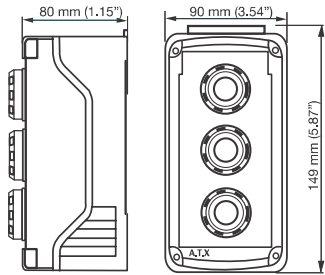
Size 1 Mounting/Fixing Details



Size 2 Enclosure



Size 2 and 3 Mounting/Fixing Details



Size 3 Enclosure